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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,795	12/21/2000	Charles A. Drake		4636

7590 08/08/2002

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EXAMINER
NORTON, NADINE GEORGIANNA

ART UNIT	PAPER NUMBER
1764	3

DATE MAILED: 08/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/747,795	Applicant(s) DRAKE ET AL.	
	Examiner Nadine Nortoon	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification does not appear to have support for the "15 or less" limitation in claim 7 or the "viscosity index of 140" in claim 22.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13-16 include the phrase "said composition". The phrase lacks antecedent basis in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12, 18, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Landis et al.(4,967,030).

Applicants are claiming a process for upgrading an oligomerization product. Applicants process involves contacting the oligomerization product with a catalyst system comprising a Group VIII metal and ZSM-5.

The reference of Landis et al.(4,967,030) discloses a process that involves treating a feed produced by oligomerization of olefins such as ethylene and propylene. See column 6, lines 35-45 and column 2, lines 41-46. The oligomerized feed is contacted with a composition containing a group VIII metal such as platinum in the presence of hydrogen. See column 2, lines 64-68. Suitable supports include ZSM-5 and alumina. See column 2, lines 64-68. Process conditions include a temperature of 100-500°C and a pressure of 50-2000 psig. See column 8, lines 35-42. Landis et al.(4,967,030) discloses an upgraded products with a viscosity indices greater than 140. See column 8, lines 15-30.

The reference of Landis et al.(4,967,030) succeeds at disclosing a process for upgrading oligomers with steps corresponding to applicants' contacting of a feed with a VIIII/ZSM-5 catalyst system.

Applicants process is anticipated by the reference of Landis et a.(4,967,030) because it discloses essentially the same ZSM-5/VIII contacting with an oligomerized olefin.

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Landis et al.(4,967,030).

See teachings of Landis et al.(4,967,030) above.

It is noted that the reference of Landis et al.(4,967,030) is silent about the pour point of the final product.

Applicants' pour point properties are considered to be inherent in the final product of Landis et al.(4,967,030) because the final product of Landis et al.(4,967,030) is produced by essentially the same steps/conditions as applicants' final product.

Applicants' pour point property would obviously be provided upon practicing the process of Landis et al.(4,967,030).

Claim Rejections - 35 USC § 103

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landis et al.(4,967,030).

See teachings of Landis et al.(4,967,030) above.

It is noted that the reference is silent about the proportions of ZSM-5 and Group VIII metal.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the disclosed catalyst contains larger portions of ZSM-5 (e.g. 70-90wt %) than VIII metal (0.1 to 2 wt%) because it is desirable to employ noble metals in reduced amounts in order to reduce cost.

In addition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select any proportion of VIII and ZSM-5 because it has been held that there is no invention where the difference in proportions is not critical and has been ascertained by routing experimentation since the determination of workable ranges is not considered to be inventive. In re Swain and Adams 70 USPQ 412 (CCPA 1746).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 4, 6-12 and 17-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 9, 13, 14,

17, 21-26, 31, 32, 35, 40 and 42-44 of copending Application No. 09/718,044. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to treating an oligomerization product with a composition containing a zeolite (ZSM-5), porous support and Group VIII metal.

Several differences are noted between the present claims and the claims of U.S. Application No. 09/718,044. The claims of U.S. Application No. 09/718,044 refer to the use of a first and second solid material whereas the present claims refer to the use of catalyst system including a ZSM-5 and Group VIII component. In addition, several of the claims in U.S. Application No. 09/718,044 refer to production of a synthetic base oil.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the first/second solid material defined in the claims of U.S. Application No. 09/718,044 and the catalyst system of the present claims would accomplish similar conversion because both compositions contain similar components including a zeolite (ZSM-5), a Group VIII metal component and a porous support.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the process defined in the present claims would similarly produce a synthetic base oil because the same process step is accomplished (contacting oligomerization product with similar catalyst components).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 4, 6-12 and 17-22 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 09/718,044 which has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application.

See basis for obviousness of claims in the double patenting rejection above.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the

claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadine Norton whose telephone number is 703-305-2667. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knode can be reached on 703-308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

N.N.
August 6, 2002

NADINE G. NORTON
PRIMARY EXAMINER